

# UNITED STATES PARTMENT OF COMMERCE Patent and Traderark Office

Address: COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231

APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. 09/293,455 04/16/99 **DEBELIUS** S 0275D-000247 **EXAMINER** MMC1/0613 HARNESS. DICKEY & PIERCE P.L.C. TAMAI,K P.O. BOX 828 **ART UNIT** PAPER NUMBER BLOOMFIELD HILLS MI 48303 2834 **DATE MAILED:** 

Please find below and/or attached an Office communication concerning this application or proceeding.

**Commissioner of Patents and Trademarks** 

06/13/00

# Office Action Summary

Application No. 09/293,445

Applicant(3)

**Debelius** 

Examiner

Karl Tamai

Group Art Unit 2834



Responsive to communication(s) filed on	
☐ This action is <b>FINAL</b> .	
☐ Since this application is in condition for allowance except for formal matters, in accordance with the practice under Ex parte Quay#835 C.D. 11; 453 O.G. 213.	the merits is closed
A shortened statutory period for response to this action is set to expire3month(s), or thirty longer, from the mailing date of this communication. Failure to respond within the period for response application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the page 37 CFR 1.136(a).	will cause the
Disposition of Claim	
	e pending in the applicat
Of the above, claim(s) <u>1-4, 6-11, 13-18, 20, and 21</u> is/are with	
Claim(s)	
Claim(s)	
☐ Claim(s) <u>5, 12, and 19</u>	
☐ Claims are subject to restrictio	n or election requirement.
Application Papers	
🗴 See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.	
☐ The drawing(s) filed on is/are objected to by the Examiner.	
☐ The proposed drawing correction, filed on is ☐ approved ☐disappro	ved.
∑ The specification is objected to by the Examiner.	
☐ The oath or declaration is objected to by the Examiner.	
Priority under 35 U.S.C. § 119	
☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).	
☐ All ☐Some* None of the CERTIFIED copies of the priority documents have been	
received.	
received in Application No. (Series Code/Serial Number)	
received in this national stage application from the International Bureau (PCT Rule 17.2(a))	<b>,</b>
*Certified copies not received:	<i>).</i> :
Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).	
Attachment(s)	
∑ Notice of References Cited, PTO-892	
☐ Information Disclosure Statement(s), PTO-1449, Paper No(s).	į
☐ Interview Summary, PTO-413	
Notice of Draftsperson's Patent Drawing Review, PTO-948	
☐ Notice of Informal Patent Application, PTO-152	
SEE OFFICE ACTION ON THE FOLLOWING PAGES	

Art Unit: 2834

Attorney Docket: 0275D-000247

#### **DETAILED ACTION**

### Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 1-21 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claims 1-21 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor, at the time the application was filed, had possession of the claimed invention.

The specification does not enable or contain a full, clear, concise, and exact written description of the a central bore sized to balance said shaft during rotation. Merely providing a bearing having a central bore will not balance the shaft, and the specification does not disclose how the proposed central bore will be sized to balance the shaft. Further clarification is required. For the purpose of advancing prosecution on the merits the examiner will read the claim with the structural limitation of the central bore being sized to allow shaft rotation.

Art Unit: 2834

Attorney Docket: 0275D-000247

### Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 4. Claims 1-2, 6, 7, 8, 9, 13, 14, 15, 16, 20, and 21 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Someya et al. (Someya) (US 4,795,926). Someya teaches a motor with a housing 3, a stator assembly 6 with an armature 7 rotatable within the armature on a shaft 5 with two ends, a commutator 8 on the shaft 8 with brushes 9 mounted on an end plate 4, a bearing 2 having a central bore sized to allow rotation of the shaft. The bearing including an enlarged portion, where a retainer 12/13 is positioned in the enlarged portion to keep the shaft engaged with the bearing. Someya teaches the housing surrounding the bearing which is integrally fixed with the endplate 3. The retainer having washer 12 which abuts the bearing to prevent axial movement of the shaft, and where the washer 12 is positioned between the commutator and the bearing. It is inherent that the terminals 10 are connected to a power source and that the motor is used as some tool(drive a wheel, a disk drive, a pencil sharpener, etc..), with the tool connected to the motor shaft output 5.

Art Unit: 2834

Attorney Docket: 0275D-000247

#### Claim Rejections - 35 USC § 103

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 6. Claims 1-4, 7-11, 14-18, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dafler(US 3,624,434) and Wrobel(US 4,801,252). Dafler teaches a stator 42 with a rotatable armature 50, with a commutator 58, with brushes 70 held within an endplate 18, with bearings 28/26 on both ends of the shaft, the bearings surrounded by a housing 20 integrally fixed with the end plate 18, the housing having a receiving bore with a stepped configuration, and a retainer 84 on the shaft to retain the bearing. Dafler teaches every aspect of the invention except the bearing having an enlarged portion for receiving the retainer and the bearing having a stepped configuration to receive the bearing. Wrobel teaches the equivalence of the retainer flush to the end of the shaft figure 4 and abutting the enlarged portion of the bearing 3. Wrobel teaches a bearing with a stepped outer surface which seats in the bearing housing 5. It would have been obvious to a person skilled in the art at the time of the invention to construct the motor of Dafler with the recessed bearing of Wrobel because it is within the ordinary skill in the art to choose between known equivalents and because the recessed bearing is taught to help position of the bearing on the shaft and within the housing, and with the stepped outer surface of the bearing two mate with the bearing housing, as taught by Wrobel.

4

Art Unit: 2834

Attorney Docket: 0275D-000247

Claims 6, 13, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over 7. Dafler(US 3,624,434) and Wrobel(US 4,801,252), in further view of Rosenthal, Jr. et al.(Rosenthal)(US 3,829,722). Dafler and Wrobel teach every aspect of the invention except a washer between the bearing and the commutator. Rosenthal teaches a washer between the bearing and the commutator. It would have been obvious to a person skilled in the art at the time of the invention to construct the motor of Dafler and Wrobel with a washer between the bearing and the commutator because Rosenthal(figure 1) shows that such washers are known and used in the motor are and because it is obvious to a person skilled in the art that the washer acts as a buffer between the rotating and non-rotating parts.

## Allowable Subject Matter

Claim 5, 12, and 19 are objected to as being dependent upon a rejected base claim, but 8. would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

5

Art Unit: 2834

Attorney Docket: 0275D-000247

Any inquiry concerning this communication or earlier communications from the examiner 9. should be directed to Karl I.E. Tamai whose telephone number is (703) 305-7066. The examiner can be normally contacted on Monday through Friday from 8:00 am to 5:00 pm.

6

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Nestor Ramirez, can be reached at (703)308-1371. The facsimile number for the Group is (703)305-3432.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0956.

Karl I Tamai

PATENT EXAMINER

June 9, 2000